WHAT IS CLAIMED IS:

1. Apparatus for stabilizing an epicardial surface of the heart, comprising:

a shaft; and

a foot coupled to the shaft, the foot having a first arm, a second arm, and a space between the first and second arms, the first and second arms each having a contact surface for engaging the heart, a proximal end, a distal end and a length defined between the proximal and distal ends, the length of the first arm being longer than the length of the second arm.

2. The apparatus of claim 1, wherein:

the first arm is at least 30% longer than the second arm.

3. The apparatus of claim 1, wherein:

the foot has a bottom surface, the bottom surface including the contact surface of the first and second arms, the contact surface generally lying in a plane, the bottom surface also having lateral surfaces which taper away from the plane.

4. Apparatus for stabilizing an epicardial surface of the heart comprising:

an arm; and

a first foot coupled to the arm, the foot having a contact surface for engaging the heart and a slot in which a vessel on the heart may be positioned, the slot being aligned with a central axis, the foot having a shape which is asymmetrical relative to the central axis.

5. The apparatus of claim 4, wherein:

the first foot has first and second arms, the first and second arms having different shapes.

6. The apparatus of claim 4, further comprising:

a second foot having a different shape than the first foot.

7. Apparatus for stabilizing an epicardial surface of the heart comprising:

an arm; and

a foot coupled to the arm, the foot having a contact surface for engaging the heart, and a slot in which a vessel on the heart may be positioned, the slot defining an axis, wherein the foot is attached to the arm at a location offset from the axis.

8. The apparatus of claim 7, wherein:

the foot has a lateral side; and

the arm is attached to the foot along the lateral side.

9. Apparatus for stabilizing an epicardial surface of the heart comprising:

an arm; and

a foot having a contact surface for engaging the epicardial surface; and

a coupling for detachably connecting the foot to the arm.

10. The apparatus of claim 9, further comprising:

a second foot having a second contact surface for engaging the epicardial surface and, the second foot being shaped differently than the first foot, the second foot being configured for connecting to the shaft with the coupling.

11. The apparatus of claim 9, wherein:

the first and second feet have connectors which detachably engage the arm, the connectors for the first and second feet being positioned on opposite sides.

12. Apparatus for stabilizing an epicardial surface of the heart comprising:

an arm; and

a first foot including a bottom surface having a contact surface for engaging the heart, a slot in which a vessel on the heart may be positioned, wherein at least a portion of the bottom surface is convex.

13. The apparatus of claim 12, wherein:

the first foot is generally convex when viewed along a central axis defined by the slot.

14. The apparatus of claim 12, wherein:

the bottom surface has lateral surfaces which taper away from the contact surface.

15. The apparatus of claim 14, wherein:
the lateral surfaces taper away within an angle of 2-15 degrees.

16. The apparatus of claim 14, further comprising:
a second foot which is different than the first foot;
the first and second feet being detachable from the arm.

17. A method of performing a coronary anastomosis on a heart of a patient comprising:
providing a stabilizer having a shaft and a foot, the foot having a first arm, a second arm, and a slot therebetween;
accessing a coronary artery on the patient's heart;
placing the foot in engagement with the heart so that the coronary artery is positioned in the slot and the first arm retracting the apex of the heart; and
performing an anastomosis on the coronary artery.

18. The method of claim 17, wherein:
the placing step is carried out with the coronary artery being an artery selected from arteries in the group consisting of the circumflex and branches of the right coronary arteries.

19. A method of performing coronary anastomoses on a heart of a patient comprising:
providing a stabilizer system having a shaft, a first foot and a second foot;
coupling the first foot to the shaft;
placing the first foot in engagement with the heart so as to stabilize the surface thereof;
performing an anastomosis on a first coronary artery which is stabilized by the first foot;
decoupling the first foot from the shaft;
coupling the second foot to the shaft;
placing the second foot in engagement with the heart so as to stabilize the surface thereof; and

performing an anastomosis on the second coronary artery with the second foot stabilizing the second coronary artery.

20. A flexible arm for holding a medical instrument, comprising:

a plurality of links each having a hole therethrough;

an elongate element extending through the holes, wherein tensioning the elongate element locks the plurality of links in a fixed orientation; and

a frictional element positioned between adjacent links, the frictional element enhancing frictional engagement between adjacent links when the elongate element is tensioned.

21. The flexible arm of claim 20, wherein:

the frictional element is a screen.

22. The flexible arm of claim 21, wherein:

the screen is not attached to the links.

23. The flexible arm of claim 21, wherein:

the layer is attached to a side of the link to form a side which is harder than an other side of the link.

24. A device for holding a medical instrument, comprising:

a flexible arm having a plurality of links;

an elongate, flexible element extending through the plurality of links;

a tensioning device movable between a first position and a second position, the first position tensioning the plurality of links to lock the plurality of links in a fixed position, the second position permitting the plurality of links to move relative to one another; and

a body, the flexible arm being supported by the body; and

a base link which is pivotable relative to the body about an axis, the base link directing the elongate element at an angle relative to the axis.

25. The device of claim 24, wherein:

the base link directs the elongate element at an angle of 45-90 degrees relative to the axis.

26. The device of claim 24, further comprising:

a spring biasing the base link toward an unlocked position.

27. The device of claim 24, wherein:

the base link directs the elongate element to a position which is at least 0.30 inch offset from the axis.

28. The device of claim 24, wherein:

the base link directs the elongate element to a position which is at least 0.50 inch offset from the axis.

29. A device for holding a medical instrument, comprising:

a flexible arm having a plurality of links;

an elongate, flexible element extending through the plurality of links;

a tensioning device movable between a first position and a second position, the first position locking the plurality of links in a fixed position, the second position permitting the plurality of links to move relative to one another; and

an actuator coupled to the tensioning device for moving the tensioning device between the first and second positions, the actuator being biased toward the first position so that the flexible arm is in the fixed position, wherein actuation of the actuator moves the first tensioning device to the second position so that the flexible arm is free to move.

30. The device of claim 29, further comprising:

a retractor;

the flexible arm coupled to the retractor with a locking mechanism movable between locked and unlocked positions, the flexible arm being locked to the retractor when the locking mechanism is in the locked position;

the actuator being operably coupled to the locking mechanism, wherein actuation of the actuator moves the locking mechanism to the unlocked position.

31. The device of claim 29, further comprising:

a medical instrument coupled to the flexible arm, the medical instrument being pivotable relative to the flexible arm;

the actuator being coupled to the medical instrument so that actuation of the actuator permits the medical instrument to pivot relative to the flexible arm.

32. The device of claim 29, wherein:

the actuator is biased toward the first position by a spring.

33. A device for stabilizing a medical device, comprising:

a base;

a flexible arm coupled to the base, the flexible arm having a plurality of links, the plurality of links each having a central axis, the central axis of a distal link lying on a first axis;

a flexible element extending through the plurality of links;

a tensioning device coupled to the flexible element; and

a medical device coupled to the distal end of the arm, the medical device being pivotable relative to the flexible arm around a second axis which is offset relative to the first axis.

34. The device of claim 33, wherein:

the first axis forms an angle of 70-110 degrees with the second axis.

35. A device for holding a medical instrument, comprising:

an access device configured to maintain an opening in a patient;

a flexible arm having a plurality of links and an elongate element extending through the links, the elongate element being tensioned to lock the arm, the flexible arm having a locking mechanism to lock the arm to the access device; and

an actuator coupled to the elongate element, the actuator being movable between a first position and a second position, the arm and locking mechanism being locked in the first position and being unlocked in the second position.

36. The device of claim 35 further comprising:

a medical instrument pivotally mounted to the arm;

the actuator also being operably coupled to the medical instrument to prevent pivoting when in the first position and permitting pivoting in the second position.

37. A suction element for stabilizing a patient's heart, comprising:

a malleable skeleton; and

a coating over the skeleton;

the malleable skeleton having hinges formed by thinner portions of the coating, the hinges permitting distortion of the malleable skeleton.

38. The suction element of claim 37, wherein:

the coating extends over part of the skeleton; and

the hinges are formed by exposed portions of the skeleton.

39. A method of stabilizing a surgical site, comprising:

providing a stabilizing foot having a first arm and a second arm, the first and second arms being spaced apart to form an opening therebetween, at least one of the first and second arms having a movable portion;

positioning the foot in contact with the patient's heart so that a target site is between the first and second arms;

moving the portion of the foot to provide retraction of a structure adjacent the target site; and

holding the foot in a fixed position to stabilize the heart.

40. The method of claim 39, wherein:

the providing step is carried out with the foot having at least one suction recess for adhering the foot to the heart, the suction recess being coupled to a suction lumen;

the method further including the step of applying suction to the suction lumen to adhere the foot to the patient's heart.

41. The method of claim 39, wherein:

the moving step is carried out after the positioning step.

42. The method of claim 39, wherein:

the moving step is carried out before the positioning step.

43. The method of claim 39, wherein:

the providing step is carried out with the movable portion having a hinge.

44. The method of claim 43, wherein:

the providing step is carried out with the foot having a frame and a body mounted to the frame, the hinge being formed by an integrally formed part of the frame.

45. The method of claim 39, wherein:

the providing step is carried out with the movable portion being at a distal tip of at least one of the first and second arms.

46. The method of claim 45, wherein:

the providing step is carried out with the movable portion being at both distal tips of the first and second arms.

47. The method of claim 45, wherein:

the providing step is carried out with the movable portion extending at least 0.25 inch.

48. The method of claim 47, wherein:

the providing step is carried out with the movable portion extending at least 0.50 inch.